ABSTRACT

The present invention relates to a scanning electron microscope employing a deceleration field forming technology (retarding), more particularly a scanning electron microscope which separates and detects secondary electrons at high efficiency.

The object of the present invention is accomplished by providing an electron source, a lens for condensing the primary electron beam which is emitted from said electron source, a detector for detecting electrons which are generated by radiation of the primary electron beam onto a specimen, a first deceleration means for decelerating the primary electron beam which is radiated onto said specimen, a second deceleration means for decelerating electrons which are generated on the specimen, and a deflector for deflecting said electrons which are decelerated by said second decelerating means.